Claims

I claim:

1. A conveying structure for a cotton harvester row unit having an upright fore-and-aft extending cotton receiving structure with opposite ends, a floor structure, and a material discharge opening adjacent one of the ends opening into an area of reduced air pressure for removing cotton from the row unit, the structure comprising

first and second fore-and-aft spaced upright tubes having lower air outlets opening towards the discharge opening; and

a source of air under pressure connected to the upright tubes for providing flow of air through the outlets towards the opening, the flow of air from the air outlet of the first tube moving cotton from a forward area of the row unit towards the discharge opening and the blast of air from the outlet of the second tube sweeping the floor near the outlet to thereby prevent plugging near the outlet.

2. The conveying structure set forth in claim 1 wherein the upright tubes comprise row unit frame members.

3. The conveying structure set forth in claim 1 wherein the source of air under pressure includes a fore-and-aft extending air feed structure extending above the row unit and connected to upper ends of the upright tubes.

4. The conveying structure set forth in claim 1 further including upright front and rear doffers directing cotton into the cotton receiving structure, and wherein the first and second upright tubes are located adjacent the front and rear doffers, respectively.

5. The conveying structure as set forth in claim 4 wherein the front and rear doffers intersect a fore-and-aft extending upright plane.

6. The conveying structure set forth in claim 5 wherein the lower air outlets are located adjacent lower ends of the doffers.

7. The conveying structure set forth in claim 1 wherein the second upright tube is offset inwardly from the first upright tube and the outlet of the second upright tube is aligned with one side of the material discharge opening.

8. The conveying structure set forth in claim 7 wherein the outlet of the

second upright tube opens rearwardly and outwardly towards the material discharge opening.

9. A conveying structure for a cotton harvester row unit adapted for movement in a forward direction, the row unit having forward and aft ends, a row-receiving area, first and second fore-and-aft spaced upright harvesting drum structures located on one side only of the row-receiving area, an upright fore-and-aft extending cotton receiving structure with a floor structure located on the one side of the row-receiving area, and a suction opening adjacent one of the aft end, the conveying structure comprising

first and second fore-and-aft spaced tubes having air outlets opening over the floor structure towards the suction opening;

air conduit structure connected to the tubes and providing air flow through the outlets towards the suction opening, the flow of air from the air outlet of the first tube moving cotton rearwardly towards the suction opening and the air flow from the outlet of the second tube sweeping the floor near the outlet to thereby prevent plugging near the outlet.

10. The conveying structure set forth in claim 9 wherein the tubes comprise row unit frame members.

11. The conveying structure set forth in claim 9 wherein the tubes are upright and the air conduit structure includes a fore-and-aft extending air conduit extending above the row unit and connected to upper ends of the upright tubes.

12. The conveying structure set forth in claim 9 further including upright front and rear doffers directing cotton into the cotton receiving structure, and wherein the first and second upright tubes are upright and are located adjacent the front and rear doffers, respectively.

13. The conveying structure as set forth in claim 12 wherein the front and rear doffers intersect a fore-and-aft extending upright plane.

14. The conveying structure set forth in claim 13 wherein the air outlets are located adjacent lower ends of the doffers.

15. The conveying structure set forth in claim 9 wherein the second upright tube is offset inwardly from the first upright tube and the outlet of the second upright

tube is aligned with one side of the suction opening.

16. The conveying structure set forth in claim 15 wherein the outlet of the second tube opens rearwardly and outwardly towards the suction opening.

17. The conveying structure set forth in claim 9 wherein the air conduit structure includes a first conduit section extending forwardly from the aft end of the row unit, a connector connecting the first conduit section to the second tube, a second conduit section connected to and extending forwardly from the connector and connected to the first tube.

18. The conveying structure as set forth in claim 17 wherein the second conduit section extends in the fore-and-aft direction directly above a side of the row unit opposite the row-receiving area.

19. The conveying structure as set forth in claim 9 wherein the air outlets include a deflector structure for controlling air flow direction.

20. A conveying structure for a cotton harvester row unit adapted for movement in a forward direction, the row unit having forward and aft ends, a row-receiving area, fore-and-aft spaced upright harvesting drum structures defining a tandem drum arrangement located on one side only of the row-receiving area for removing cotton from a row of plants, an upright fore-and-aft extending cotton receiving structure with a floor structure located on the one side of the row-receiving area, and a suction opening adjacent the aft end, the conveying structure comprising:

means for directing a blast of air over the floor structure adjacent the forward drum structure towards the suction opening to propel cotton removed by the forward drum structure through the cotton receiving structure towards the suction opening; and

means for directing an additional blast of air over the floor structure adjacent the aft drum structure towards the suction opening to help propel the cotton removed by the forward drum structure and the cotton removed by the aft drum structure through the suction opening.